

WHAT IS CLAIMED IS:

1. An electronic device having a touch sensor capable of detecting a human body approaching or touching its casing, in  
5 which

the touch sensor comprises an electrode of a predetermined area provided in an inner portion of the casing at a distance from an outer surface of the casing and detecting means for detecting a change of capacitance from the electrode when the human body  
10 approaches or touches the outer surface of the casing.

2. The electronic device according to Claim 1, in which the detecting means includes:

clock signal generating means for generating a clock  
15 signal;

delaying means for giving a delay in rising up the clock signal according to the capacitance detected by the electrode when the human body approaches or touches the outer surface of the casing,

20 means for generating a signal depending on the amount of the delay, with the clock signal not passing through the delaying means defined as a reference; and

A/D converting means for A/D converting a signal depending on the amount of the change from analog to digital.

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3. The electronic device according to Claim 2, in which the detecting means detects a change of a facing area of

the electrode and the human body.

4. The electronic device according to Claim 2 or Claim 3,  
in which

5 the detecting means detects an interval that the human body  
faces the electrode.

5. The electronic device according to one of Claims 2 to  
4, in which

10 a plurality of the electrodes are provided, each electrode  
including the delaying means and the means for generating a signal  
depending on the amount of the delay of a signal passing through  
the corresponding delaying means, with a common clock signal as  
a reference.

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6. The electronic device according to one of Claims 1 to

5, in which

the electrodes are arranged along a shape of the outer  
surface so as to make each portion of the electrodes at equal  
20 distance from the outer surface of the casing.

7. The electronic device according to one of Claims 1 to

6, in which

the casing forms an appearance of a toy and the outer  
25 surface of the casing corresponding to a portion provided with  
the electrode is defined as a touch portion with the human body.